

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Brooke L. Small, et al.

Serial No.: 10/782,554

Filed: February 19, 2004

For: OLEFIN OLIGOMERIZATION

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Group Art Unit: 1764

Examiner: Not yet assigned

Confirmation No.: 5152

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Commissioner for Patents
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This Information Disclosure Statement, including completed Forms PTO/SB/08A and PTO/SB/08B comprise a list of pertinent art of which the Applicants are aware. Copies of the foreign patents and publications listed on Forms PTO/SB/08A and PTO/SB/08B are enclosed herewith. In accordance with 37 C.F.R. 1.98, no paper copies of the U.S. Patents and Patent Applications are enclosed.

The submission of this Information Disclosure Statement and Forms PTO/SB/08A and PTO/SB/08B is not an admission that the art cited is "prior" with respect to the present invention,

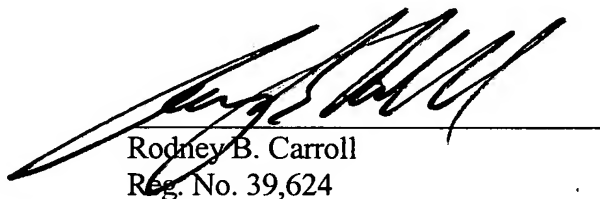
nor is it a representation that no better art exists. Applicants hereby reserve the right to swear behind or otherwise disprove any alleged "prior" nature of any art cited should the facts support and that situation warrant such an action. It is submitted that the art cited does not constitute a bar to the patentability of Applicants' invention under 35 U.S.C. § 102 or § 103.

Applicants believe that no fee is due for the filing of this Information Disclosure Statement. Nonetheless, in the event that a fee is due, please charge it to Deposit Account 50-1515 of Conley Rose, P.C.

Respectfully submitted,
CONLEY ROSE, P.C.

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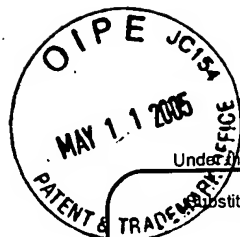
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PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/782,554
Filing Date	February 19, 2004
First Named Inventor	Brooke L. Small
Art Unit	1764
Examiner Name	N/A
Attorney Docket Number	210507US (4081-03900)

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA	US- 4,971,986	11/20/1990	Stanek, et al.	
	AB	US- 5,438,027	08/01/1995	Reagen, et al.	
	AC	US- 5,451,645	09/19/1995	Reagen, et al.	
	AD	US- 5,470,926	11/28/1995	Reagen, et al.	
	AE	US- 5,523,507	06/04/1996	Reagen, et al.	
	AF	US- 5,543,375	08/06/1996	Lashier, et al.	
	AG	US- 5,563,312	10/08/1996	Knudsen, et al.	
	AH	US- 5,689,028	11/18/1997	Lashier, et al.	
	AI	US- 5,763,723	06/09/1998	Reagen, et al.	
	AJ	US- 5,786,431	07/28/1998	Reagen, et al.	
	AK	US- 5,814,575	09/29/1998	Reagen, et al.	
	AL	US- 5,856,257	01/05/1999	Freeman, et al.	
	AM	US- 5,859,303	01/12/1999	Lashier	
	AN	US- 5,919,996	07/06/1999	Freeman, et al.	
	AO	US- 5,955,555	09/21/1999	Bennett	
	AP	US- 5,986,153	11/16/1999	Kallenbach, et al.	
	AQ	US- 6,103,946	08/15/2000	Brookhart III, et al.	
	AR	US- 6,214,761	04/10/2001	Bennett	
	AS	US- 6,380,451	04/30/2002	Kreischer, et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
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Sheet **2** of **4****Complete if Known**

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		Number-Kind Code ² (if known)			
	AT	US- 6,455,648	09/24/2002	Freeman, et al.	
	AU	US- 6,489,497	12/03/2002	Brookhart III, et al.	
	AV	US- 6,534,691	03/18/2003	Culver, et al.	
	AW	US- 6,555,723	04/29/2003	Schiffino	
	AX	US- 2002/0028941 A1	03/07/2002	De Boer, et al.	
	AY	US- 2003/0036615 A1	02/20/2003	Brookhart III, et al.	
	AZ	US- 2003/0050494 A1	03/13/2003	Brookhart III, et al.	
	BA	US- 2004/0180778 A1	09/16/2004	Small	
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		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	CA	EP 1229020 A1	08/07/2002	EPO		
	CB	WO 01/10875 A1	02/15/2001	WIPO		
	CC	WO 01/58874 A1	08/16/2001	WIPO		
	CD	WO 02/00339 A2	01/03/2002	WIPO		
	CE	WO 02/28805 A2	04/11/2002	WIPO		
	CF	WO 03/011876 A1	02/13/2003	WIPO		

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First Named Inventor	Brooke L. Small
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		US-			
		US-			
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	CG	CN 1306014 A	08/01/2001	China		

Examiner Signature		Date Considered	
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				Art Unit	1764
				Examiner Name	N/A
Sheet	4	of	4	Attorney Docket Number	210507US (4081-03900)

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	DA	Britovek, George J.P., et al., "Oligomerisation of Ethylene by Bis(imino)pyridyliron and -cobalt Complexes," Chem. Eur. J, Vol. 6, No. 12, 2000, pgs. 2221-2231.	
	DB	Kumar, R.N., et al., "Mononuclear and Binuclear Complexes of Fe(II) and Cu(II) with 2,6-Diacetyl Pyridine Monoxime and Phenylene Diamine," Asian Journal of Chemistry, Vol. 11, No. 3, 1999, pgs. 964-969.	
	DC	Nelson, S. Martin, et al., "Metal-Ion Controlled Reactions of 2,6-Diacetylpyridine with 1,2-Diaminoethane and 2,6-Diformylpyridine with o-Phenylenediamine and the Crystal and Molecular Structure of a Pentagonal Pyramidal Cadmium(II) Complex containing Unidentate o-Phenylenediamine," Journal of the Chemical Society, Dalton Transactions, Inorganic Chemistry, Vol. 2, 1982, pgs. 407-415.	
	DD	Small, Brooke L., et al., "Highly Active Iron and Cobalt Catalysts for the Polymerization of Ethylene," Journal of the American Chemical Society, Vol. 120, No. 16, 1998, pgs. 4049-4050.	
	DE	Small, Brooke L., et al., "Iron-Based Catalysts with Exceptionally High Activities and Selectivities for Oligomerization of Ethylene to Linear α -Olefins," Journal of the American Chemical Society, Vol. 120, No. 28, 1998, pgs. 7143-7144.	
	DF	International Search Report and Written Opinion of the International Searching Authority, PCT/US2004/004472, 07/16/2004, 7 pgs.	
	DG	Application No. 11/009,916, "Methods for Producing a Hexadentate Bimetallic Complex," Small, Brooke L., Filing Date: 12/10/04, Specification (pgs. 1-92).	

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